

Claims

What is claimed is:

1. A method for generating 3-dimensional image, in the method to photograph a
5 photographic object in order to generate 3-dimensional images by using an image
photographing part comprising a cameral part, a turn table part, a photographing angle
adjustment part, a X-axis adjustment part and a Y-axis adjustment part and an image
management device in which the cameral part is joined with said photographing angle
adjustment part, said x-axis adjustment part and said y-axis adjustment part and said
10 photographic object is placed on the top of said turn table part, comprising the following
steps:

- (a) transmitting movement control signals from the image management device
to a image-photographing part, where said movement control signals comprises camera
location control signal, photographing angle control signal and turn table control signal;
- 15 (b) that said turn table part stands by in the state of rotating at a fixed speed
corresponding to said movement control signal or rotating at a rotation angle
corresponding to said movement control signal;
- (c) that said Y-axis adjustment part adjusts the height of said camera part
corresponding to said movement control signal;
- 20 (d) that said X axis adjustment part adjusts proximate position of said camera

part corresponding to said movement control signal, where said proximate position is a distance between said cameral part and said photographic object;

(e) that said photographing angle adjustment part adjusts a photographing angle of the camera part corresponding to said movement control signal, wherein said
5 photographing angle is an angle that makes the internal central points of said camera part and said photographic object form a straight line;

(f) generating digital image by photographing a photographic object at said height, said proximate position and said photographing angle adjusted;

(g) transmitting said digital image generated to the image management device;

10 and

(h) repeating from said step (a) to said step (g) until all the digital images are generated in order to generate 3 dimensional image corresponding to said photographic object;

wherein, said movement control signal is updated whenever said digital image
15 is generated.

2. The method for generating 3-dimensional image of claim 1, further comprising the following steps;

that image management device stores said digital image; and

20 generating 3-dimensional image by employing said stored plural digital images.

3. The method for generating 3-dimensional image of claim 2, wherein said digital image is stored corresponding to rotation speed data or rotation angle data of said turn table part, height data of said camera part, and proximate position data of said camera part and said 3-dimensional image is generated by employing rotation speed data or rotation angle data of said turn table part, height data of said camera part, and proximate position data of said camera part.

4. The method for generating 3-dimensional image of claim 2, further comprising the following steps:

that said image management device displays said 3 dimensional images in a display part;

receiving a display status changing command of said 3 dimensional image, where display status changing command is selected from a group consisting of expansion, reduction and rotation; and

displaying 3-dimensional image whose display status is changed corresponding to said display status changing command in said display part.

5. The method for generating 3-dimensional image of claim 1, wherein said step (a) to said step (g) are performed simultaneously.

6. The method for generating 3-dimensional image of claim 1, wherein while said turn table part rotates at a fixed speed, said camera part photographs digital images corresponding to all angles of the photographic object at a first height and then, said
5 camera part photographs digital images corresponding to all angles of the photographic object at a second height.

7. The method for generating 3-dimensional image of claim 1, wherein while said turn table part stands by with rotating at a first rotating angle, digital images
10 corresponding to all sides of said photographic object are photographed and then, while said turn table part stands by with rotating at a second rotating angle, digital images corresponding to all sides of said photographic object are photographed.

8. The method for generating 3-dimensional image of claim 2, wherein said 3-
15 dimensional image is a single compressed file form

9. The method for generating 3-dimensional image of claim 1, wherein said image management device is one selected from the group consisting of computer, mobile communication terminal, and personal digital assistant(PDA).

10. The method for generating 3-dimensional image of claim 1, wherein size of said photographic object is determined in accordance with detection signals of the sensor attached to said camera part.

5 11. A system for generating 3-dimensional image comprising:

an image photographing part comprising a camera part, a turn table part arranged a certain distance apart from the camera part, a photographing angle adjustment part enable to rotate the camera part vertically, a X-axis adjustment part enable to move the camera part forward or backward(horizontally) against said turn
10 table part, and Y-axis adjustment part enable to move the camera part vertically against said turn table part device, in which the camera part is joined with said photographing angle adjustment part, said x-axis adjustment part and said y-axis adjustment part and said photographic object is placed on the top of said turn table part;

an image photographing control part that generates a movement control signal,
15 transmits to an image photographing part, and receives plural digital images photographed by the camera part, wherein movement control signal includes camera location control signal, photographing angle control signal and turn table control signal;

a 3 dimensional image creating part that generates 3-dimensional images by using the plural digital images; and

20 a storage part that stores the plural digital images and 3-dimensional images.

12. The system for generating 3-dimensional image of claim 11, wherein as said turn table part stands by in the state with rotating at a fixed speed or at a rotation angle corresponding to said movement control signal, said Y-axis adjustment part, X-axis
5 adjustment part, and photographing angle adjustment part adjusts height, proximate position and photographing angle of said camera part, and said camera part at the adjusted height, proximate position and photographing angle photographs the photographic object and then, transmits the created digital images to said photographing image control part.

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13. The system for generating 3-dimensional image of claim 11, wherein said X-axis adjustment part and Y-axis adjustment part comprise a guide rail, a supporter fitted with the guide rail and moving along it, a cylinder fitted with the support, and a piston fitted with the cylinder and fixed with the camera part at one end thereof.

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14. The system for generating 3-dimensional image of claim 11, wherein said X-axis adjustment part and Y-axis adjustment part comprise multiple joint robot fixed with the cameral part at one end thereof.

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15. The system for generating 3-dimensional image of claim 11, wherein said

X-axis adjustment part and Y-axis adjustment part comprise a guide rail, a supporter fitted with the guide rail and moving along it, a pair of screws arranged in a row with the supporter and enable to rotate by a driving means, a pair of sliders inserted into the screw and moving in an opposite direction each other of the rotation direction of the screw, a link jointed with each hinge at one ends of the pair of sliders, and a camera supporting plate jointed with each hinge of the other ends of the link.

16. A device for generating 3-dimensional image where it is joined with an image management device and photographs an object in order to create 3 dimensional image, comprising:

a turn table drive part that rotates a turn table supporting a photographic object at a fixed speed or at a rotating angle corresponding to the movement control signal received from the image management device;

a camera part that photographs the photographic object, generates digital image, and transmits the generated digital images to said image management device;

a Y-axis adjustment part that adjusts height of said camera part corresponding to said movement control signal;

an X-axis adjustment part that adjusts proximate position of said camera part corresponding to said movement control signal, where the proximate position is a distance between said camera part and said photographic object; and

a photographing angle adjustment part that adjusts a photographing angle of said camera part corresponding to said movement control signal, where the photographing angle is an angle that makes the internal central points of said camera part and said photographic object form a straight line,

5 wherein said camera part is joined with said photographing angle adjustment part, said X-axis adjustment part and said Y-axis adjustment part, and said movement control signal is updated whenever said digital image is generated.

17. A recording medium for recording program, where the program of
10 commands enable to be executed in the image management device in order to execute the process for generating 3-dimensional image is embodied materially and the recording medium is decoded by said image management device, comprising the steps:

transmitting an image generated by movement control signal to an image photographing part;

15 receiving plural digital images corresponding to the photographic object from image photographing part;

storing the plural digital images; and

generating 3-dimensional image by employing the plural digital images,

wherein said image photographing part comprises a turn table part, a camera
20 part, a photographing angle adjustment part, an X-axis adjustment part, and a Y-axis

adjustment part; when said turn table part stands by in the state of rotating at a fixed speed or at a rotation angle corresponding to said movement control signal, said photographing angle adjustment part, X-axis adjustment part, and Y-axis adjustment part adjust height, proximate position and photographing angle of the camera part; and
5 said camera part photographs said photographic object at the adjusted height, proximate position and photographing angle and then transmits the generated digital image.